

ANNEXURE-I

Pro-forma furnishing Actual annual performance/operational data for the coal /lignite based thermal generating stations for the 5 year period from 2008-09 to 2012-2013

	Particulars	Units	2008-09	2009-10	2010-11	2011-12	2012-13	Basis of information/ methodology
1	Name of Company		NTPC Ltd.					
2	Name of Station		TSTPS					
3	Installed Capacity and Configuration	MW	3000 MW (2x500 MW+4x500 MW)					
4	Rated Steam Parameters (Also state the type of Steam turbine and Boiler		Temp./Pressure: 540 deg C/170 ksc					
5	Type of BFP		2 nos Steam Driven+ 1 motor driven					
6	Circulating Water System		Closed cycle					
7	Any other Site specific feature		Stg I : High Power Intensive Tube Mills					
8	Fuels:							
8.1	Main Fuel:		Coal					
8.1.1	Annual Allocation or/ and Requirement	MT	Annual allocation through FSA =17.30MMT (3000MW), Annual requirement =21.40 MMT					Requirement has been worked out for 90% PLF
8.1.2	Sources of supply/ procurement along with contracted quantity and grade of coal		FSA signed with Mahanadi Coal fields Limited(MCL)					
			Annual contracted quantity of 17.30 MMT.					
			Grade of coal as per FSA is E- F					
8.1.2.1	FSA	MT	16.56	17.94	15.02	13.48	15.02	
8.1.2.2	Imported	MT	0.94	1.38	2.84	3.40	2.22	
8.1.2.3	Spot Market/e auction	MT	0.00	0.00	0.00	0.00	0.00	
8.1.3	Transportation Distance of the station from the sources of supply	km	30					
8.1.4	Mode of Transport		MGR/IR					
8.1.5	Maximum Station capability to stock main fuel	Days & MT	15 days & 8.0 Lac. MT					
8.2	Secondary Fuel:		HFO, LDO					
8.2.1	Annual Requirement	klitre	23652					
8.2.2	Sources of supply		HPCL, Vizag depot					
8.2.3	Transportation Distance of the station from the sources of supply	Km	612 km					
8.2.4	Mode of Transport		Rail					
8.2.5	Maximum Station capability to stock secondary fuels	klitre	13000 KL					
9	Cost of Spares:							
9.1	Cost of Spares capitalized in the books of accounts (St-I)	(Rs. Lakh)	0	0	0	1019		2012-13 data to be submitted later
	Cost of Spares capitalized in the books of accounts (St-II)	(Rs. Lakh)	1576	1211	1221	1579		
9.2	Cost of spares included in capital cost for the purpose of tariff (St-I)	(Rs. Lakh)	0	0	0	0		
	Cost of spares included in capital cost for the purpose of tariff (St-II)	(Rs. Lakh)	1576	0	0	0		
10	Generation							
10.1	Actual Gross Generation at generator terminals (Commercial Stage wise)							
10.1.1	Stage-1	MU	7768.45	7675.79	7440.59	6924.85	7123.76	
10.1.2	Stage-2	MU	14788.28	16083.12	15092.23	14932.26	14326.49	
10.2	Actual Net Generation Ex-bus	MU						
10.2.1	Stage-1	MU	7250.33	7137.26	6933.98	6451.83	6600.15	
10.2.2	Stage-2	MU	14051.61	15259.87	14279.52	14091.17	13441.14	
10.3	Scheduled Generation Ex-bus							Based on REA
10.3.1	Stage-1	MU	7167.54	7062.33	6871.59	6499.72	6605.74	
10.3.2	Stage-2	MU	13960.03	15170.45	14197.15	14181.37	13518.90	

ANNEXURE-I

Pro-forma furnishing Actual annual performance/operational data for the coal /lignite based thermal generating stations for the 5 year period from 2008-09 to 2012-2013

	Particulars	Units	2008-09	2009-10	2010-11	2011-12	2012-13	Basis of information/ methodology
1	Name of Company		NTPC Ltd.					
2	Name of Station		TSTPS					
11	Average Declared Capacity (DC)							Based on REA
11.1	Stage-1	MW	818.50	810.42	792.61	755.75	766.04	
11.2	Stage-2	MW	1593.63	1741.32	1683.17	1655.86	1549.72	
12	Actual Auxiliary Energy Consumption including colony consumption							
12.1	Stage-1	MU	518.12	538.53	506.61	473.02	523.61	
12.2	Stage-2	MU	736.66	823.25	812.70	841.09	885.35	
13	Actual Energy supplied to Colony from the station	MU	13.46	14.32	14.99	14.93	15.83	
14	Main Fuel:							
14.1	Consumption :							
14.1.1	Domestic Coal (Linked mine/ Other mines/e-auction/spot)	MT	16910066	18072238	14781790	13521233	15177255	
14.1.2	Imported Coal*	MT	1005886	1371206	2828220	3307873	2334378	
14.2	Gross Calorific Value (GCV):							
14.2.1	Domestic Coal (As received)	kCal/kg						
	(As fired)	kCal/kg						
14.2.2	Imported Coal (As received) AD Basis	kCal/kg	5382	5474	5443	5472	5450	
14.2.3	Spot market/e-auction coal (As received)	kCal/kg						
14.2.4	Weighted Average Gross Calorific value (As received)	kCal/kg						
14.2.5	Weighted Average Gross Calorific value (As fired)	kCal/kg	2959	2873	3005	3061	2915	
14.3	Price of Coal:							
14.3.1	Weighted Average price of Domestic coal	(Rs/MT)	731.4	792.5	885.1	964.5	959.4	
14.3.2	Weighted Average price of imported coal	(Rs/MT)	6026.8	5486.2	6705.2	8283.6	6382.2	
14.3.3	Weighted Average price of spot market/ e-auction coal	(Rs/MT)	0.0	0.0	0.0	0.0	0.0	
14.3.4	Weighted Average price of all the Coals (as received)	(Rs/MT)	1017.0	1128.9	1811.1	2438.7	1656.5	
14.4	Blending:	% and MT						
14.4.1	Blending ratio of imported coal with domestic coal		5.6%	7.1%	16.1%	19.7%	13.3%	Imported/ Total Coal consumption
14.4.2	Proportion of e-Auction coal in the blending		NA	NA	NA	NA	NA	
14.4.3	Actual Average stock maintained	MT	136312	93849	165726	195998	125548	Average of monthly closing stock
14.5	Actual Transit & Handling Losses for coal/Lignite	%						
14.5.1	Pit- Head Station							
14.5.1.1	Transit loss from linked mines	%	0.18	0.18	0.19	0.18	0.24	
14.5.1.2	Transit loss from non-linked mines including e-auction coal mines.							
14.5.1.3	Transit loss of imported coal	%	0.02	0.03	0.03	0.07	0.10	
14.5.2	Non-Pit Head station							
14.5.2.1	Transit loss from linked mines							
14.5.2.2	Transit loss from non-linked mines including e-auction coal mines.							
14.5.2.3	Transit loss of imported coal							
15	Secondary Fuel Oil :							
15.1	Consumption (HFO)	klitre	13993	14763	9684	8264	12167	
	Consumption (LDO)		367	280	458	567	531	
15.2	Weighted Average Gross Calorific value (As received) (HFO/LDO)	kCal/kg(litre)	9517	9508/ 9445	9509/ 9435	9514/ 9433	9514/ 9435	

ANNEXURE-I

Pro-forma furnishing Actual annual performance/operational data for the coal /lignite based thermal generating stations for the 5 year period from 2008-09 to 2012-2013

	Particulars	Units	2008-09	2009-10	2010-11	2011-12	2012-13	Basis of information/ methodology
1	Name of Company		NTPC Ltd.					
2	Name of Station		TSTPS					
15.3	Weighted Average Price-HFO	Rs/ KL	27923.5	26944.2	30223.9	40914.8	47103.1	
15.3	Weighted Average Price-LDO	Rs/ KL	44192.1	37457.9	44488.3	52602.4	59946.2	
15.4	Actual Average stock maintained (HFO)	klitre	4007	5171	5290	5433	4577	Average of monthly closing stock
	Actual Average stock maintained (LDO)		470	465	504	524	588	
16	Weighted average duration of outages							
16.1	Scheduled Outages	MU	1521.5	711.5	1163.0	2011.7	1367.5	
16.2	Forced Outages	MU	488.8	661.6	1150.7	1110.8	1316.1	
16.3	Number of trippings (Forced outages)	No	29	46	51	60	51	
16.4	Number of start-ups :	No	34	48	55	65	53	
16.4.1	Cold Start-up	No	13	12	24	17	30	
16.4.2	Warm Start-up	No	4	23	20	35	8	
16.4.3	Hot start-up	No	17	13	11	13	15	
17	NOx , SOx ,and other particulate emission in :							
17.1	Design value of emission- NOx	mg/Nm ³	NA					No norm; not considered in design
	Design value of emission- SOx	mg/Nm ³	NA					No norm; not considered in design
	Design value of emission- SPM (St-I)	mg/Nm ³	56.8					
	Design value of emission- SPM (St-II)	mg/Nm ³	50					
17.2	Actual emission (SPM) - St-I	mg/Nm ³	88-110	105-152	101-125	67-144	51-97	
17.3	Actual emission (SOx) - St-I	mg/Nm ³	790-920	780-905	803-913	765-902	780-921	
17.4	Actual emission (NOx)- St-I	mg/Nm ³	205-300	210-310	212-291	203-315	211-391	
17.2	Actual emission (SPM) - St-II	mg/Nm ³	60-95	52-89	59-92	65-95	42-98	
17.3	Actual emission (SOx)	mg/Nm ³						
17.4	Actual emission (NOx)	mg/Nm ³						
19	Detail of Ash utilization % of fly ash produced	Quantity Produced (Lakh MT)	68.93	77.00	67.49	62.35	67.26	
19.1	Conversion of value added product(Issue to Cement, RMC & Brick /block industries)	%	0.85	0.99	1.21	1.61	1.83	
19.2	For making roads & embarkment	%	0.00	0.00	0.00	0.00	0.00	
19.3	Land filling	%	6.31	7.03	11.87	1.93	7.37	
19.4	Used in plant site in one or other form or used in some other site (Mine filling & Ash dyke raising)	%	12.85	10.49	14.52	19.79	23.44	
19.5	Any other use , Please specify (Agriculture, Bottom ash cover etc.)	Qty. (Lakh M T) and usage	0.00	1.21	3.97	3.40	3.54	
20	Cost of spares actually consumed	(Rs Lakh)	3864.3	5233.5	6730.0	10008.3	10974.8	
21	Average stock of spares	(Rs Lakh)	18419.48	15788.21	17682.57	18891.2	20925.02	
22	Number of employees deployed in O&M							
22.1	Executives		465	460	459	472	488	

ANNEXURE-I								
Pro-forma furnishing Actual annual performance/operational data for the coal /lignite based thermal generating stations for the 5 year period from 2008-09 to 2012-2013								
	Particulars	Units	2008-09	2009-10	2010-11	2011-12	2012-13	Basis of information/ methodology
1	Name of Company		NTPC Ltd.					
2	Name of Station		TSTPS					
22.2	Non Executives		687	681	678	667	734	
22.3	Corporate office		3205	3272	3298	3354	3170	Total Corporate Man Power
23	Man-MW ratio		0.38	0.38	0.38	0.38	0.41	Excluding Corporate Man Power

Note:

From Oct/ Nov 2012 onwards payment to coal companies is being made on the basis of GCV as received at plant boundary. As per FSA, payment is to be made as per the quality assessed at mine end . Accordingly substantial amount billed by Coal companies are yet to be paid. Prices indicated above reflect the payment being made to Coal Companies. GCV of Domestic Coal as received is being measured only from Oct/Nov 2012